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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,253	05/02/2001	Thomas D. Lash	SAIC0043	6564

27510 7590 07/09/2004
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EXAMINER

WINDER, PATRICE L

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 07/09/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,253

Applicant(s)

LASH, THOMAS D.

Examiner

Patrice Winder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3, 5-6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-8, 12-14, 21-23, 25, 27-29 and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Bittinger et al., USPN 6,148,340 (hereafter referred to as Bittinger).

3. Regarding claim 1, Bittinger taught a method for updating information on a client using differences between old information residing on the client and new information residing on a server (abstract), said method comprising:

automatically identifying differences between current information residing on a client and new related information residing on a server (column 4, lines 2-18);

generating a difference file on a server using the identified differences (column 2, lines 19-31);

transmitting the difference file to the client (column 4, lines 58-61); and
updating the current information using the difference file resulting in updated information on the client (column 4, lines 58-61).

4. Regarding dependent claim 2, Bittinger taught the method further comprising: requesting, by a client, information from a network (column 5, lines 29-32); and retrieving the requested information, by a server connected to the network, and by the client (column 5, lines 34-38).

5. Regarding dependent claim 3, Bittinger taught the automatically identifying differences further comprises:

comparing current information retrieved in the retrieving step with information residing in storage on the server (column 5, lines 44-50), and

determining automatically, by the server, whether a previous version of the current information resides in storage on the client and server (column 5, lines 44-50).

6. Regarding dependent claim 4, Bittinger taught the method further comprising saving information, by the server, the information corresponding to versions of information sent by the server to clients (column 3, lines 61-66), wherein the version of information is correlated with the client to which it was sent (column 5, line 62-column 6, line 9).

7. Regarding dependent claim 5, Bittinger taught the requesting, by a client, of

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information from a network, is performed by a user employing a patch-enabled Web browser (column 3, lines 22-27).

8. Regarding dependent claim 6, Bittinger taught the requesting of information by a user is from a public, global network of computers, employing, a patch-enabled Web browser (Internet, column 3, lines 17-27).

9. Regarding dependent claim 7, Bittinger taught the requesting of information by a user is from a private or proprietary intranet, employing a patch-enabled Web browser (LAN, column 3, lines 17-27).

10. Regarding dependent claim 8, Bittinger taught the client connects to the network via a wireless communication method (column 3, lines 19-22).

11. Regarding dependent claim 12, Bittinger taught the new information resides on a content server (column 3, lines 27-32), the information is retrieved by a proxy server from the content server via a network, and the comparing current information is performed by the proxy server (column 5, lines 34-50).

12. Regarding dependent claim 13, Bittinger taught the client and proxy server resides on the same computer processor (column 3, lines 24-27).

13. Regarding dependent claim 14, Bittinger taught the new information resides on a content server (column 3, lines 27-32), the content server and proxy server residing on the same computer processor (column 3, lines 27-29), and the information is retrieved by a proxy server from the content server, and the comparing current information is performed by the proxy server (column 5, lines 34-50),

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14. Regarding claim 21, Bittinger taught a system for updating information on a client using patches or differences between old information residing on the client and new information residing on the server, comprising:

at least one patch enabled server connectable to a network, at least one client connectable to a network through the patch enabled server, the patch enabled server connected to the client and enabled to send requests to the network, when connected thereto, for information based on requests for information received by the server from a patch enabled browser on the client (column 3, lines 17-36),

the patch-enabled server comprising:

a data store and enabling routine for storing information, the information correlating requested information retrieved from the network with at least one client recipient of the requested information retrieved from the network (column 3, lines 58-66), and a patch generator for automatically identifying differences in versions of requested information and generating difference files if it is determined by analyzing the information that a previous version of the client requested information resides in storage on the server and the client (column 4, lines 2-18), and transmitting the difference file to the client (column 4, lines 58-67).

15. Regarding dependent claim 22, Bittinger taught the patch enabled browser on the client further comprises:

a patch identifier for identifying whether received information is a binary difference file (patch) (column 4, lines 37-41); and

a patch executer, which executes the binary patch received from the server and updates the current information on the client using the binary difference file resulting in updated information on the client (column 4, lines 58-67).

16. Regarding dependent claim 23, Bittinger taught the client is connected to the server via a wireless transmission path (column 3, lines 18-22).

17. Regarding dependent claim 25, Bittinger taught the patch executer is a plug-in module of a patch enabled Web browser (column 3, lines 22-27).

18. Regarding dependent claim 27, Bittinger taught the information stored in the data store is transactional information to correlate requested information sent by the patch enabled server and received by a client with temporal and recipient identification information (column 4, lines 4-6, column 5, line 62-column 6, line 9).

19. Regarding dependent claim 28, Bittinger taught the patch enabled server distinguishes temporal and recipient identifying information associated with requested information sent by the patch enabled server and received by at least one of a plurality of client recipients (column 5, line 62-column 6, line 9).

20. The language of claims 29, 31-33 is substantially the same as the claims previously rejected above. Therefore claims 29, 31-33 are rejected on the same rationale as the claims previously rejected above.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bittinger in view of Fan, USPN 6,664,922 B1 (hereafter referred to as Fan).

23. Regarding dependent claim 9, Bittinger does not specifically teach the client executing a particular application. However, Fan taught a user on the client executes an application related to geo-positioning, system (GPS) technology and the information requested is map data to be transferred to the user's wireless device (column 2, lines 59-66, column 11, lines 9-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Fan's GPS application in Bittinger's differencing system would have expanded Bittinger's field of use. The motivation would have been because the cost of communication on the Internet is inexpensive.

24. Claims 10-11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bittinger in view of Lieberman, USPN 6,516,349 (hereafter referred to as Lieberman).

25. Regarding claims 10-11 and 26, Bittinger does not specifically teach the client executing a particular application.

26. Regarding dependent claim 10, Lieberman taught a user on the client executes an application related to financial markets and the information requested is financial data to be transferred to the user's device (column 7, lines 38-40, 56-58).

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27. Regarding dependent claim 11, Lieberman taught the user requests data related to financial markets at unpredictable intervals (column 4, lines 28-36, column 5, lines 45-55) and wherein the client receives updated current information using the difference file customized to the precise intervals of the requests (column 4, lines 54-64).

28. Regarding dependent claim 26, Lieberman taught the requested information is related to financial markets (column 7, lines 56-58).

29. Regarding claims 10-11 and 26, it would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Lieberman's financial application in Bittinger's differencing system would have expanded Bittinger's field of use. The motivation would have been to increase the system's responsiveness to more dynamic data content.

30. Claims 15-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bittinger in view of Jardin, USPN 6,681,327 B1 (hereafter referred to as Jardin).

31. Regarding claim 15, Bittinger taught a method for effecting secure transmission of data to a client using differences between old information residing on the client and new information residing on a server (abstract), said method comprising:

requesting, by a client, information from a network (column 5, lines 29-32), wherein a user on the client desires transmission of the information (column 5, lines 29-32);

retrieving the requested information, by a server connected to the network, via a connection, the server also connected to the client (column 5, lines 34-38);

saving transactional information, by the server, the transactional information corresponding to versions of information sent by the server to clients, wherein the version of information sent to the clients is correlated with the client to which it was sent (column 5, line 62-column 6, line 9);

comparing current information, retrieved when retrieving requested information, with information residing in storage in the server (column 5, lines 44-50);

determining automatically, by the server, whether a previous version of the current information resides in storage on the client and server, and if not, then sending the requested information to the client via a means (column 5, lines 44-50); and

otherwise generating a difference file on the server using the identified differences (column 2, lines 19-31);

transmitting the difference file to the client, and updating the current information using the difference file resulting in updated information on the client (column 4, lines 58-61). Bittinger does not specifically teach a secure communication means. However, Jardin taught a secure communication means (column 4, lines 24-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Jardin's secure communication means in Bittinger's differencing system would have improved system security. The motivation would have been to provide security means without reducing system throughput.

32. Regarding dependent claim 16, Jardin taught the requested information is sent by the server to the client in encrypted form and the difference file generated is transmitted in unencrypted form (column 6, lines 38-47).

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33. Claims 17-18, 20 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Bittinger in view of Fan.

34. Regarding dependent claim 17, Bittinger taught a method of efficient transmission to and from an apparatus, using differences between old information residing on a recipient and new information residing on a sender (abstract), said method comprising:

requesting, by a recipient, information from the sender, wherein one of the recipient and sender resides on apparatus with limited bandwidth or limited accessibility to transmission information from a network (column 5, lines 29-32);

retrieving the requested information, by a server connected to the sender, the server also connected to the recipient via a wireless transmission means (column 5, lines 34-38);

saving transactional information, by the server, the transactional information corresponding to versions of information sent by the sender to the recipients, wherein the version of information sent to the recipients is correlated with the recipient to which it was sent (column 5, line 62-column 6, line 9);

comparing current information, retrieved when retrieving the requested information, with information residing in storage in the server (column 5, lines 44-50);

determining automatically, by the server, whether a previous version of the current information resides in storage on the recipient and server, and if not, then sending the requested information to the client via a means (column 5, lines 44-50); and

otherwise, generating a difference file on the server using the identified differences (column 2, lines 19-31);

transmitting the difference file to the recipient, and updating the current information using the difference file resulting in updated information on the recipient (column 4, lines 58-61). Bittinger does not specifically teach a submersible vehicle. However Fan taught the apparatus is a submersible vehicle (column 11, lines 19-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Fan's submersible vehicle in Bittinger's differencing system would have expanded Bittinger's field of use. The motivation would have been to take advantage of the low costs associated with utilizing Internet connections.

35. Regarding dependent claim 18, Fan taught the recipient is a client residing on the submersible vehicle (column 11, lines 19-25) and the server does not reside on the submersible vehicle and is directly connected to the sender (column 6, lines 9-12).

36. Regarding dependent claim 20, Bittinger taught the sender and recipient are interchangeable depending on the direction of the data flow to/from the apparatus and for a specific transmission, thereby effecting bi-directional patching of data (column 3, lines 17-33). Fan taught the apparatus is a submersible vehicle (column 11, lines 19-25). For motivation for combination see claim 17, above.

37. Regarding dependent claim 24, Bittinger does not specifically teach the client is on a submersible vehicle. However, Fan taught a client is on a submersible vehicle (column 11, lines 19-25). For motivation for combination see claim 17, above.

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38. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bittinger and Jardin as applied to claim 15 above, and further in view of Fan.

39. Regarding dependent claim 19, Bittinger does not specifically teach a submersible vehicle. However, Fan taught the sender resides on the submersible vehicle and is connected to the server (column 6, lines 9-12) and the client does not reside on the submersible vehicle (column 6, lines 1-3, 12-14). For motivation for combination see claim 17, above.

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Bittinger et al., USPN 5,859,971: taught differencing client/server communication system for use with CGI forms; and
- b. Schmidt et al., USPN 6,535,894 B1: an apparatus and method for incremental updating of archive files.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is 703-305-3938. The examiner can normally be reached on Monday-Friday, 10:30 am-7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 703-308-3662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrice Winder
Primary Examiner
Art Unit 2155

plw